

PATENTDocket No. 1232-4252US1REMARKS

Independent claims 1, 3, 6, and 9 are aspects of the claimed invention. The claimed invention is characterized as follows.

The claimed image sensing apparatus includes an image sensing means for sensing a subject image formed on an image sensing plane and outputting an image signal corresponding to the subject. A photographer first selects any zone on the image sensing plane in which an optimum exposure control state of exposure is desired to be obtained by zone selecting means. Exposure detection is then performed automatically for detecting an exposure condition on the basis of an image signal in a selected zone selected by the zone selecting means.

Next, an exposure control is performed automatically for controlling exposure based upon the detected exposure condition by the exposure control means. The memory means then stores control parameters of the exposure control means when an exposure control by said exposure control means is completed and an optimum exposure control state is obtained. Thereafter, control is performed automatically for controlling the exposure control means to maintain the optimum exposure control state by using the control parameters stored in the memory means.

In this fashion, only by photographer's selection of a zone (subject), the optimum exposure control state to the selected zone will be maintained appropriately. That is, the optimum exposure condition is locked to the selected zone even when the photographer's visual axis (line of sight) gets out of the selected zone because the control parameters are stored in the memory means. Accordingly, the claimed image sensing apparatus can perform optimum exposure

PATENTDocket No. 1232-4252US1

control to the selected zone when it is difficult for the photographer to accurately discern the state of exposure of the subject by the EVF or the LCD.

Shimizu '374 discloses an exposing apparatus which detects a gain of the iris 2, a shutter speed of the CCD image pickup device 3, and a gain amount of the AGC amplifier 4 and uses these detection results to control these elements 2-4, by comparing with a predetermined signal R, a digital image pickup signal, which has been generated from an output of the CCD 3. Hereupon, the signal R is generated by modulating a predetermined exposure reference signal supplied from the circuit 9 in accordance with the reference level modulation coefficient K.

As the Examiner pointed out, there is a relation between the coefficient k and the luminance level. However, the coefficient K is merely read out from the ROM 16, because the ROM is a "read only memory". The coefficient K is not stored in the memory means when an exposure control is completed and an optimum exposure control state is obtained. Further, the coefficient K is merely used for generating the signal R. Therefore, the reference level modulation coefficient K is not optimized control parameter for a selected zone. In the cited reference, the applicant cannot find such a description which discloses optimizing control parameter and storing optimized control parameter.

Accordingly, Shimizu '374 does not teach or suggests either to store the optimized exposure control parameters for a selected zone nor to maintain the optimum exposure state based upon them. That is, the coefficient K is not related to a selected zone. Accordingly, if the photographer's visual axis gets out of the finder, the exposure and focus control for the selected zone cannot be maintained.

PATENTDocket No. 1232-4252US1

In the Advisory Action, the Examiner states that Faltermeyer discloses that in the auto focus module 23, video images which are read out one after the other are stored and compared with each other, and a drive signal for the electrical focusing drive is gained from the result. Further, when the focusing adjustment is completed, a video image in optimum focusing state is produced. This video image is then stored in the auto focus module 23 and used for comparison with other video images also stored in the auto focus module 23, and from which result a drive signal for the electrical focusing drive is gained.

Faltermeyer is directed to a photomicroscope with a video camera and an exposure time control for a still camera which performs focus control by the auto-focus module 23 of the CCD camera 14, an exposure control by the exposure control 26, and a selection of image area (area position and area size) for exposure metering by the track ball 27c of the control panel 27.

However, video images stored in the auto-focus module 23 are merely a previous result of a focus detection condition and used for comparing with incoming video images to detect the best focus condition. As the Examiner has stated, "video images which are read out one after the other are stored and compared with each other" in the auto focus module 23. That is the difference between the claimed invention and the apparatus of Faltermeyer. That is, data in the auto-focus module 23 is changing every moment. Therefore, data stored in the auto focus module 23 is not the adjusting data relating to the prescribed state.

In the advisory Action of page 3, lines 13-17, the Examiner stated, "When the focusing adjustment is completed, ... a drive signal for the electrical focusing drive is gained." Applicants could not find such a description in Faltermeyer.

PATENTDocket No. 1232-4252US1

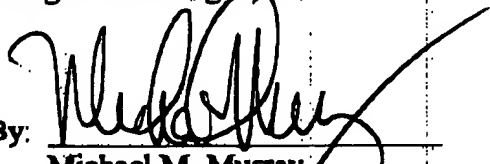
Accordingly, Applicants respectfully submit that Faltermeier neither teaches nor suggests the subject matter of the present invention.

CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and allowance of this application.

Respectfully submitted,

Morgan & Finnegan, L.L.P.

By: 
Michael M. Murray
Registration No. 32,537

Dated: June 24, 1998

Mailing Address:
Morgan & Finnegan, L.L.P.
345 Park Avenue
New York, New York 10154
(212)758-4800